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	Fire Alarm & Public Address Testing in Hospital Facility			
	Department QHSE	Document Ref. No. HSE DOCS-OSH-FAPAT-00	Issue Date 00-12-2023	Revision 00

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Activity:	Fire Alarm and Public Address Testing				RA No.	HSE DOCS-OSH-FAT-00				
Location:	ABC				Date :	21-02-2024				
Equipment to be used:					Revision Status					
Fire Alarm Testing Kit, SOLO smoke detector test spray					Others, if any					
					Revision No.:		Revised Date:			
					NA		NA			
Potential Hazards / Conditions considered (Tick Box)					Persons at Risk					
Fall From Height	☐	Falling of Materials	☐	Subcontractors	☐	Public	☒			
Electricity	☐	Slips/Tripping	☒	Employees	☒	Visitors	☒			
Personal protective equipment's (PPE)										
☒	Safety Helmet	☐	Respiratory / Berating Apparatus	☒	Gloves	☒	Goggles	☐	Full Body Safety Harness	
☒	Safety Boots	☐	Overalls	☒	Masks	☐	Ear Plugs/ Defenders	☐	Others, if any	
Mandatory HSE requirements (Tick Box)										
☐	Safety Induction	☒	Proper PPE	☒	Work Permit	☒	Proper Tools/ Equipment'	☐	Proper Barricade & Warning Sign in The Affected area	
☒	Tool Box Talk	☒	Safe Work Place	☒	Proper Supervision	☒	Pre-Task Briefings	☐	Others, if any	
Risk Level: H (HIGH-Potential to cause death or permanent injury) M (MEDIUM –Potential to cause loss time injury) L (LOW- An injury treatable with First Aid)										
Likelihood (L)	Severity (S)	Class of risk (L*S)	LIK LIH OO D (L)	← CONSEQUENCES →						Note: 1. Risk assessment must be addressed to workers by work in charge before starting job.
Improbable	Negligible	High = 15-25		5	5	10	15	20	25	
Remote	Minor	Medium = 07-14		4	4	8	12	16	20	
Probable	Reportable	Low = 01-06		3	3	6	9	12	15	
Occasional	Serious			2	2	4	6	8	10	
			1	1	2	3	4	5		

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					1	2	3	4	5	2. Risk assessment is a continuous process hence to be reviewed depending on activity and risk involved
SEVERITY (S)										

Sr.	RISKS	HAZARDS	CONSEQUENCES	EVALUATION			CONTROL MEASURES IN PLACE OR TO BE IMPLEMENTED	RE-EVALUATION			PERSONS RESPONSIBLE FOR IMPLEMENTATION AND SUPERVISION
				C o n s e q u e n c e	L i k e l i h o o d	R i s k S c o r e		C o n s e q u e n c e	L i k e l i h o o d	R i s k S c o r e	

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1.	Disruption and Panic <u>Patient and staff stress:</u> Unexpected alarms can cause anxiety and disorientation, especially for vulnerable patients. It may interrupt critical medical procedures or disrupt recovery. <u>Misinterpretation:</u> Alarms without clear communication can lead to confusion and panic, hindering orderly and safe evacuation. <u>Emergency resource misuse:</u> False alarms trigger unnecessary responses from fire services, diverting them from genuine emergencies elsewhere.	<u>Unannounced alarms:</u> Loud alarms can cause fear and anxiety, especially for vulnerable patients and unfamiliar staff. <u>Confusion regarding real vs. test:</u> Without clear communication, alarms might be mistaken for a real fire, leading to unnecessary panic and evacuation attempts. <u>Disruption to treatment and procedures:</u> Alarms can interrupt critical medical procedures or disrupt ongoing care, potentially impacting patient outcomes.	<u>Patient and Staff Stress:</u> <u>Unannounced alarms:</u> Increased anxiety and stress for patients, potentially leading to worsened medical conditions. Panic and confusion, hindering orderly evacuation and potentially causing injuries. Decreased staff morale and productivity due to stress and disruption. <u>Evacuation confusion:</u> Delays in evacuation, increasing fire risk and potential for injuries or fatalities. Equipment damage due to improper handling during evacuation. Psychological distress for patients, especially those with pre-existing anxiety or trauma.	3	4	12	<u>Announce testing schedules:</u> Distribute schedules well in advance through multiple channels (e.g., posters, PA announcements, patient information sheets). <u>Offer opt-out options:</u> Allow vulnerable patients to opt-out of drills with pre-arranged alternative safety plans. <u>Minimize alarm volume:</u> Use lower volume settings or consider alternative notification methods like pre-recorded voice messages or flashing lights. <u>Provide noise-canceling headphones:</u> Offer to patients who are sensitive to loud noises. <u>Train staff on communication:</u> Equip staff with effective communication skills to manage patient anxieties and provide clear instructions during drills. <u>Competent personnel:</u> As per UAE Fire and Life Safety Code of Practice, Testing should be conducted by qualified and experienced personnel.	1	2	2	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians/ Sub-Contractor Supervisor & technicians
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2.	Operational Challenges <u>Medical equipment interference:</u> Sensitive equipment might malfunction due to alarm sounds or power fluctuations during testing. <u>Evacuation difficulties:</u> Moving patients, especially critical cases, during drills can pose logistical challenges and risks. <u>Disrupted workflows:</u> Testing can interrupt ongoing medical procedures, documentation, and other crucial staff activities.	<u>Evacuation drills during peak hours:</u> Evacuating large numbers of patients and staff can strain resources and disrupt hospital operations, even if temporary. <u>Delayed access to critical areas:</u> Depending on the testing zone, access to essential areas like ICU or surgery units might be temporarily restricted, impacting urgent care. <u>Equipment interference:</u> Testing procedures could unintentionally trigger sensitive medical equipment, requiring recalibration or causing delays.	<u>Medical Equipment Disruption:</u> <u>Life-support equipment disruption:</u> Life-threatening consequences for patients reliant on the equipment. Loss of vital medical data and compromised patient care. <u>Loss of data:</u> Compromised patient confidentiality and potential legal repercussions. Delays in diagnosis and treatment due to missing data. Increased workload for staff to re-enter data, impacting patient care.	3	4	12	<u>Coordinate with critical care units:</u> Schedule testing outside critical procedures and coordinate with staff to ensure minimal disruption. <u>Identify essential equipment:</u> Clearly identify life-support equipment and develop protocols for ensuring uninterrupted operation during testing. <u>Implement backup power:</u> Utilize battery backups or portable generators for critical equipment. <u>Test during non-critical periods:</u> Schedule testing during periods of low equipment utilization. Regularly test backup power sources: Ensure backup power systems are regularly tested and maintained. <u>Competent personnel:</u> As per UAE Fire and Life Safety Code of Practice, Testing should be conducted by qualified and experienced personnel.	1	2	2	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians/ Sub-Contractor Supervisor & technicians
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3.	Safety Concerns <u>Accidental activation:</u> During testing, accidental triggering of sprinklers or suppression systems can lead to water damage and equipment malfunctions. <u>Overlooking real fires:</u> Over-familiarity with test alarms can lead to delayed recognition of an actual fire, potentially delaying response. <u>Security breaches:</u> Evacuation drills might create unintended security vulnerabilities while doors and access points are unlocked.	<u>Misinterpretation of alarms:</u> Impaired or unconscious patients might not respond properly to alarms, requiring additional staff attention during evacuation. <u>Mobility limitations:</u> Evacuating patients with limited mobility poses challenges and requires specific plans and trained personnel. <u>Increased use of elevators:</u> Evacuation may involve increased elevator usage, potentially overloading them and posing risks for those who need them for medical reasons. <u>Additional Hazards:</u> False alarms: Improper testing procedures or equipment malfunctions can trigger false alarms, wasting resources and causing unnecessary disruption.	<u>Delayed procedures:</u> Increased patient wait times and potential for complications due to delayed treatment. Loss of revenue for the hospital due to rescheduled procedures. Frustration and inconvenience for patients and staff. <u>Resource strain:</u> Staff diverted from patient care tasks to manage evacuations and re-entry. Increased fatigue and stress for staff, impacting patient safety and quality of care. Potential for errors and delays in other areas of hospital operations. <u>Additional Hazards:</u> <u>False alarms:</u> Desensitization to alarms, reducing preparedness for real emergencies. Unnecessary strain on fire and rescue services, diverting resources from other emergencies.	3	4	12	<u>Schedule testing strategically:</u> Avoid peak hours and consult with relevant departments to minimize impact on procedures and appointments. <u>Develop communication plan:</u> Have a clear plan for informing staff and patients about potential delays and rescheduling procedures if necessary. <u>Cross-train staff:</u> Train staff on various roles and responsibilities to ensure efficient response and re-entry during evacuations. <u>Consider phased testing:</u> Divide testing into smaller phases to minimize overall disruption. <u>Additional Hazards:</u> <u>Investigate and address false alarms promptly:</u> Analyze causes of false alarms and implement corrective measures to minimize recurrence. <u>Use qualified personnel:</u>	1	2	2	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians/ Sub-Contractor Supervisor & technicians
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Ensure testing is conducted by trained and certified professionals following established protocols.

Conduct risk assessments:

Regularly assess testing procedures for potential fire hazards and implement safety measures accordingly.

Maintain testing equipment:

Ensure smoke machines, testing tools, and fire alarm systems are regularly inspected and maintained.

Simulate realistic scenarios:

Include diverse scenarios in drills to improve staff and patient preparedness for different types of emergencies.

Competent personnel:

As per UAE Fire and Life Safety Code of Practice, Testing should be conducted by qualified and experienced personnel.

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Name:	Designation:	Date:	Signature:	
Reviewed & Approved By:				
Name:	Designation:	Date:	Signature:	

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